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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,899	09/18/2003	Richard D. Dettinger	ROC920030162US1	8513

46797 7590 02/15/2008

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EXAMINER
TO, JENNIFER N

ART UNIT	PAPER NUMBER
2195	

MAIL DATE	DELIVERY MODE
02/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/666,899	DETTINGER ET AL.	
	Examiner	Art Unit	
	JENNIFER N. TO	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,14-30 and 32-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,14-30 and 32-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12, 14-30, and 32-42 are pending for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10, and 21-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The claim language in the following claims is not clearly understood:

i. as per claim 1, line 3, it is not clearly understood what is meant by "initiating a primary executing entity configured to performed requests and maintain state information specific to the primary executing entity" (i.e. initiating a primary executing entity wherein the primary executing entity configured to perform requests and maintain state information specific to the primary executing entity). Line 3, it is uncertain whom maintain the state information specific to the primary executing entity (i.e. the primary executing entity itself or the requester). Line 5, it is not clearly understood what is meant by "initiating a secondary executing entity configured to performed requests and maintain state information specific to the primary executing entity" (i.e. initiating a secondary executing entity wherein the secondary executing entity configured to perform requests and maintain

state information specific to the primary executing entity). Line 5, it is uncertain whom maintain the state information specific to the secondary executing entity (i.e. the secondary executing entity itself or the requester). Line 5, it is uncertain whether the "requests" here are the same "requests" that the primary executing entity configured to perform. Line 7, it is uncertain which "requests" that the primary entity performed (i.e. the requests referred in line 3, or the request referred in line 5).

ii. as per claim 21, it is having the same deficiencies as claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4, 9, 11, 14-15, 21, 24, 27, 29, and 32-33 are rejected under 35 U.S.C.102(b) as being anticipated by Tohonen et al. (hereafter Tohonen) (WO 99/57620).

6. As per claim 1, Tohonen teaches the invention as claimed including a computer-implemented method for parallel processing of requests (abstract), comprising:

initiating a primary executing entity configured to perform requests and maintain state information specific to the primary executing entity (fig. 1; abstract, page 3, lines 6-7, sending the service requests to the server);

initiating a secondary executing entity configured to perform requests and maintain state information specific to the secondary executing entity (fig. 1; abstract, page 3, lines 6-7, sending the service requests to the server);

performing, by the primary executing entity, requests (abstract, the server processing the requests); and

performing, by the secondary executing entity, the requests previously performed by the primary executing entity in a time-delayed and step-wise fashion while the primary executing entity continues to execute requests, whereby each executing entity maintains its own respective state information independent of, and temporally displaced from, the other executing entity (abstract; page 3, lines 20-33; page 4, lines 1-13; page 9, lines 10-25, i.e. the requests that successfully processed by a server are queue in the queue system and being processed a gain by the servers, hence there are two situations could accrued (1) the requests are going to be processed by the second server (2) the requests are going to be processed by the same sever again, thus Tohonen meet the claim limitation since it teaches the requests are going to be processed by the second server).

7. As per claim 4, Tohonen teaches that wherein the executing entities are threads (abstract).

8. As per claim 9, Tohonen teaches that wherein the requests are time ordered and processed by each performing executing entity according to the time order (fig. 1; abstract).

9. As per claim 11, Tohonen teaches the invention as claimed including a computer-implemented method for parallel processing of requests (abstract), comprising:

receiving user requests from a user (abstract, receiving service request from the client);

placing the user requests on a queue in a time-ordered manner (abstract, storing the requests in the queue);

performing, by a primary executing entity, each current user request upon being placed on the queue (abstract; the server processing the request); and

performing, by a secondary executing entity, at least a portion of the user requests on the queue step-wise with the primary executing entity and N-requests behind the primary executing entity; wherein each of the executing entities maintain their own respective state information (abstract; page 3, lines 20-33; page 4, lines 1-13; page 9, lines 10-25, i.e. the requests that successfully processed by a server are queue in the queue system and being processed a gain by the servers, hence there are two situations could accrued (1) the requests are going to be processed by the second server (2) the requests are going to be processed by the same sever again, thus

Tohonen meet the claim limitation since it teaches the requests are going to be processed by the second server).

10. As per claim 14, Tohonen teaches that wherein the executing entities are threads (abstract).

11. As per claim 15, Tohonen teaches that wherein executing entities are executable code elements of an application (abstract).

12. As per claims 21, 24, 27, 29, and 32-33, they are rejected for the same reasons as claims 1, 4, 9, 11, and 14-15 above.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 2-3, 5-8, 10, 12, 16-20, 22-23, 25-26, 28, 30, and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tohonen et al. (hereafter Tohonen) (WO 99/57620), and in view of Murphy et al. (hereafter Murphy) (U.S. Patent No. 6185695).

15. As per claim 2, Tohonen teaches the invention substantially as claimed in claim 1. Tohonen did not specifically teaches that making the performance of the primary executing entity visible to a user; and making the performance of the secondary executing entity transparent to the user.

16. However, Murphy teaches that making the performance of the primary executing entity visible to a user (col. 4, lines 37-44); and making the performance of the secondary executing entity transparent to the user (col. 1, lines 64-67).

17. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching Tohonen and Murphy because Murphy teaching of making the performance of the primary server visible to the user and the performance of the secondary server transparent to the user would improved the performance of Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code. (Murphy, col. 1, lines 48-53).

18. As per claim 3, Tohonen teaches the invention substantially as claimed in claim 1. Tohonen did not specifically teach terminating the primary executing entity; and then performing, by the secondary executing entity, at least a portion of the requests

performed by the terminated primary executing entity and not previously performed by the secondary executing entity.

19. However, Murphy teaches terminating the primary executing entity; and then performing, by the secondary executing entity, at least a portion of the requests performed by the terminated primary executing entity and not previously performed by the secondary executing entity (col. 10, line 19 through col. 11, line 11).

20. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Tohonen and Murphy because Murphy teaching of terminating the primary executing entity, performing, by the secondary executing entity, at least a portion of the requests performed by the terminated primary executing entity and not previously performed by the secondary executing entity would improved Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code (Murphy, col. 1, lines 48-53).

21. As per claim 5, Tohonen teaches the invention substantially as claimed in claim 1. Tohonen did not specifically teach producing output by the primary executing entity; producing output by the secondary executing entity; displaying the output produced by

the primary executing entity; and discarding, without displaying, the output produced by the secondary executing entity.

22. However, Murphy teaches producing output by the primary executing entity; producing output by the secondary executing entity; displaying the output produced by the primary executing entity; and discarding, without displaying, the output produced by the secondary executing entity (fig. 2B).

23. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Tohonen and Murphy because Murphy teaching of producing output by the primary executing entity; producing output by the secondary executing entity; displaying the output produced by the primary executing entity; and discarding, without displaying, the output produced by the secondary executing entity would improved Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code (Murphy, col. 1, lines 48-53).

24. As per claim 6, Tohonen teaches the invention substantially as claimed in claim 1. Tohonen did not specifically teach upon encountering an error by the primary

executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request currently being handled by the primary executing entity.

25. However, Murphy teaches upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request currently being handled by the primary executing entity (col. 10, line 19 through col. 11, line 11).

26. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Tohonen and Murphy because Murphy teaching of upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request currently being handled by the primary executing entity would improved Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code (Murphy, col. 1, lines 48-53).

27. As per claim 7, Tohonen teaches the invention substantially as claimed in claim 1. Tohonen did not specifically teach upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error

by returning a user to a request handled by the primary executing entity prior to encountering the error.

28. However, Murphy teaches upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request handled by the primary executing entity prior to encountering the error (col. 10, line 19 through col. 11, line 11).

29. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Tohonen and Murphy because Murphy teaching of upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request handled by the primary executing entity prior to encountering the error would improved Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code (Murphy, col. 1, lines 48-53).

30. As per claim 8, Tohonen teaches the invention substantially as claimed in claim 1. Tohonen did not specifically teach upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request within a range of requests between a request being

handled by the secondary executing entity and a request being handled by the primary executing entity at the time of encountering the error.

31. However, Murphy teaches upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request within a range of requests between a request being handled by the secondary executing entity and a request being handled by the primary executing entity at the time of encountering the error (col. 10, line 19 through col. 11, line 11).

32. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Tohonen and Murphy because Murphy teaching of upon encountering an error by the primary executing entity: terminating the primary executing entity; and recovering from the error by returning a user to a request within a range of requests between a request being handled by the secondary executing entity and a request being handled by the primary executing entity at the time of encountering the error would improved Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code (Murphy, col. 1, lines 48-53).

33. As per claim 10, Tohonen teaches the invention substantially as claimed in claims 1, and 9. Tohonen did not specifically teach terminating the primary executing entity; and then performing, by the secondary executing entity, the requests performed by the terminated primary executing entity between a last request handled by the terminated primary executing entity and a last request handled by the secondary executing entity.

34. However, Murphy teaches terminating the primary executing entity; and then performing, by the secondary executing entity, the requests performed by the terminated primary executing entity between a last request handled by the terminated primary executing entity and a last request handled by the secondary executing entity (col. 10, line 19 through col. 11, line 11).

35. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Tohonen and Murphy because Murphy teaching of terminating the primary executing entity; and then performing, by the secondary executing entity, the requests performed by the terminated primary executing entity between a last request handled by the terminated primary executing entity and a last request handled by the secondary executing entity would improved Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client

application programs to be written without the burden of providing and testing failure detection and retry code (Murphy, col. 1, lines 48-53).

36. As per claim 12, it is rejected for the same reason as claim 7 above.

37. As per claim 16, Tohonen teaches the invention substantially as claim including a computer-implemented method for parallel processing of requests (abstract), comprising:

receiving user requests from a user (abstract, receiving service request from the client);

placing the user requests on a queue in a time-ordered manner (abstract, storing the requests in the queue);

performing, by a primary executing entity, each current user request upon being placed on the queue (abstract; the server processing the request); and

performing, by a plurality of secondary executing entities, at least a portion of the user requests on the queue step-wise with the primary executing entity; wherein each of the secondary executing entities is displaced from the primary executing entity and from one another by a number of user requests; and wherein each of the executing entities maintain their own respective state information (abstract; page 3, lines 20-33; page 4, lines 1-13; page 9, lines 10-25, i.e. the requests that successfully processed by a server are queue in the queue system and being processed a gain by the servers, hence there are two situations could accrued (1) the requests are going to be processed by the

second server (2) the requests are going to be processed by the same sever again, thus Tohonen meet the claim limitation since it teaches the requests are going to be processed by the second server).

38. Tohonen did not specifically teach that the performance of the primary executing entity visible to a user; and the performance of the secondary executing entity transparent to the user.

39. However, Murphy teaches that the performance of the primary executing entity visible to a user (col. 4, lines 37-44); and the performance of the secondary executing entity transparent to the user (col. 1, lines 64-67).

40. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching Tohonen and Murphy because Murphy teaching of the performance of the primary server visible to the user and the performance of the secondary server transparent to the user would improved the performance of Tohonen's system by providing a system theta recovers from server failures in a manner transparent to the client application program (i.e. user) to thereby allow client application programs to be written without the burden of providing and testing failure detection and retry code. (Murphy, col. 1, lines 48-53).

41. As per claim 17, Tohonen teaches that wherein the executing entities are threads (abstract).

42. As per claim 18, Tohonen teaches that wherein the requests are time ordered and processed by each performing executing entity according to the time order (fig. 1; abstract).

43. As per claim 19, Murphy teaches making one of the secondary executing entities visible to the user upon encountering an error by the primary executing entities (fig. 2B).

44. As per claim 20, it is rejected for the same reason as claim 7 above.

45. As per claims 22-23, 25-26, and 28, they are rejected for the same reason as claims 2-3, 5, 7, and 10 above.

46. As per claims 30, 32-48, they are rejected for the same reason as claims 11-20 above.

Response to Arguments

47. Applicant's arguments with respect to claims 1-12, 14-30, and 32-42 have been considered but are moot in view of the new ground(s) of rejection.

48. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER N. TO whose telephone number is (571)272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

49. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

50. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To
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